

Environmental Collaboration and Conflict Resolution in the Federal Government
Fiscal Year 2022 Report
U.S. Army Corps of Engineers

Background

On September 7, 2012, the Director of the Office of Management and Budget (OMB), and the Chairman of the President's Council on Environmental Quality (CEQ) issued a revised policy memorandum on environmental collaboration and conflict resolution (ECCR). This joint memo builds on, reinforces, and replaces the memo on Environmental Conflict Resolution issued in 2005, and defines ECCR as:

“. . . third-party assisted collaborative problem solving and conflict resolution in the context of environmental, public lands, or natural resources issues or conflicts, including matters related to energy, transportation, and water and land management. The term Environmental Collaboration and Conflict Resolution encompasses a range of assisted collaboration, negotiation, and facilitated dialogue processes and applications. These processes directly engage affected interests and Federal department and agency decision makers in collaborative problem solving and conflict resolution.”

The 2012 memorandum requires annual reporting by federal departments and agencies to OMB and CEQ on their use of ECCR and on the estimated cost savings and benefits realized through third-party assisted negotiation, mediation or other processes designed to help parties achieve agreement. The memo also encourages departments and agencies to work toward systematic collection of relevant information that can be useful in ongoing information exchange across departments and agencies.

The Udall Foundation’s John S. McCain III National Center for Environmental Conflict Resolution (NCECR) has, since 2005, collected select ECCR data on behalf of federal departments and agencies. *Beginning in FY 2021, the National Center is streamlining the data it collects to reduce the reporting burden on Federal Departments and Agencies and to provide the most salient information on ECCR use. This updated reporting template is a focused collection of ECCR case studies and data on capacity building, including ECCR training. Case numbers and context reporting are optional.*

Fiscal Year 2022 Data Collection

This annual reporting template is provided in accordance with the memo for activities in FY 2022.

The report deadline is Friday, January 27th, 2023.

Reports should be submitted to Steph Kavanaugh, NCECR Deputy Director, via e-mail at kavanaugh@udall.gov

Departments should submit a single report that includes ECCR information from the agencies and other entities within the department. The information in your report will become part of a compilation of all FY 2022 ECCR reports submitted. You may be contacted for the purpose of clarifying information in your report.

For your reference, synthesis reports from past fiscal years are available at <https://www.udall.gov/OurPrograms/Institute/ECRReport.aspx>.

1. Agency Submission Information

Name of Department/Agency responding:	U.S. Army Corps of Engineers (USACE)
Name and Title/Position of person responding:	Ms. Stacey Jensen Assistant for Environment, Tribal and Regulatory Affairs, Office of the Assistant Secretary of the Army (Civil Works) Ms. Susan Durden Acting Director, USACE Collaboration and Public Participation Center of Expertise
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Date this report is being submitted:	January 27, 2023
Name of ECCR Forum Representative	Dr. Stacy Langsdale

2. ECCR Capacity Building and Investment:

Describe any **NEW, CHANGED, or ACTIVELY ONGOING** steps taken by your department or agency to build programmatic and institutional capacity for environmental collaboration and conflict resolution in FY 2022, including progress made since FY 2021.

Please also include any efforts to establish routine procedures for considering ECCR in specific situations or categories of cases, including any efforts to provide institutional support for non-assisted collaboration efforts.

Please refer to the mechanisms and strategies presented in Section 5 and attachment C of the [OMB-CEQ ECCR Policy Memo](#) for additional guidance on what to include here. Examples include but are not restricted to efforts to:

- Integrate ECCR objectives into agency mission statements, Government Performance and Results Act goals, and strategic planning
- Assure that your agency's infrastructure supports ECCR
- Invest in support, programs, or trainings; and focus on accountable performance and achievement
- ECCR programmatic Full Time Equivalents (FTEs)
- Dedicated ECCR budgets
- Funds spent on contracts to support ECCR cases and programs

- a) Please refer to your agency's FY 2021 report to only include new, changed or actively ongoing ECCR investments or capacity building. **If none, leave this section blank.**

USACE Districts routinely coordinate with Federal, state, tribal and local government entities and with non-governmental stakeholders on projects and their potential impacts. Below we describe several ongoing or new steps taken by USACE to support this collaboration and ECCR more generally. We group the actions first according to priorities outlined by the Assistant Secretary of the Army for Civil Works (ASA(CW)), and then into additional areas of collaborative capacity building.

Administration Priorities

In FY22, ASA(CW) identified five priorities for the Civil Works program:

1. Upgrade the Nation's waterways and ports to strengthen supply chains and economic growth

Environmental collaboration and conflict resolution tools and capacity building are helping USACE's navigation mission strengthen supply chains and economic growth. Responses to Question 3 in this report highlight cases where USACE employed a neutral third party to support upgrades to harbors and waterways. These cases include:

- Facilitated partnering sessions for the Kentucky Lock Addition mega project
- Public Engagement Design and implementation for New Orleans District Inner Harbor Navigation Canal Lock Replacement Study & Community Impact Mitigation Plan
- Information Meeting on the Port of Nome modification for tribal entities and stakeholders
- Facilitation and Government to Government engagement for Navigational Improvements for the town of Craig, Alaska
- Akutan Harbor Improvements Feasibility Study Public Meeting
- Brunswick Harbor Stakeholder Meeting, Savannah District

2. Build innovative, climate-resilient infrastructure to protect communities and ecosystems

Environmental collaboration and conflict resolution tools and capacity building also help USACE engage communities and partner agencies to increase flood and climate resilience for communities and ecosystems. Cases cited in question 3 below include examples where USACE used a neutral third party to support community flood resilience. These cases include:

- Post-Disaster Watershed Assessments, Honolulu District (American Samoa, Guam, Commonwealth of the Northern Marianas Islands)
- Navajo Nation Flood Risk Prioritization Project
- Columbia River Treaty Domestic Infrastructure Study Stakeholder Assessment
- Ala Wai Flood Risk Management General Reevaluation Study
- 2022 Hybrid National Hurricane Program Interagency Coordinating Committee on Hurricanes and Federal Program Partner Meeting,

- Interagency Flood Fight Exercise to foster collaboration and relationship building to increase flood fight readiness capabilities
 - Tijuana Bi National Dam Safety Tabletop Exercise Planning build capacity and relationships to better prepare for flood events in the area
 - Climate-Resilient Coastal Flood Risk Reduction Workshop in San Francisco
3. Modernize civil works programs to better serve the needs of disadvantaged communities

A new major initiative that USACE is responding to is the Administration’s priority and directives related to Environmental Justice (e.g., Justice40). In March and April 2022, ASA(CW) released Interim Implementation Guidance on Environmental Justice. In response, USACE HQ has developed an evolving outreach and engagement strategy for environmental justice communities. Several districts have proactively responded with different actions including identifying District EJ Leads, securing funding, and learning about EJ map databases available (SOVI, CEJST, and EPA EJScreen). Four divisions that border Canada (NWD, MVD, LRD, and NAD) jointly secured funding for FY23 for the International Joint Commission work including Indigenous Knowledge and relationship building with Tribal Nations residing within both the US and Canada. Baltimore District formed an EJ Working Group that holds quarterly seminars to discuss guidance and best practices and how to engage EJ communities. Los Angeles District hosted “Water Equity and Anti-racism for the LA Basin” training for the Los Angeles River Urban Waters Federal Partnership. Some districts have also begun identifying strategies for EJ engagement, such as San Francisco. Chicago District identified organizations, agencies, people, and resources within their area of responsibility and began to create district strategies.

In addition, this report (Question 3) documents multiple examples of USACE using third party neutrals to enhance collaboration to better engage underserved communities to solve their water-resource related problems:

- Co-lead the Middle Rio Grande endangered Species Collaborative program which serves tribal and other signatories to restore endangered species habitat
- Public engagement design and implementation for New Orleans District Inner Harbor Navigation Canal Lock Replacement Study & Community Impact Mitigation Plan
- Information meeting on the Port of Nome modification for tribal entities and stakeholders
- Navajo Nation Flood Risk Prioritization Project
- Coordinating with 27 Indian tribes to execute a programmatic agreement to support NEPA compliance related to California’s Salton Sea Management Program 10-Year Plan
- Facilitation and Government to Government engagement surrounding Navigational Improvements project for Craig, AK
- Akutan Harbor (AK) Improvements Feasibility Study (Tribal Partnership Program) Public Meeting
- Designing and facilitating a hybrid planning charette for Alaska District first-ever ecosystem restoration project at Robe Lake (AK) for the Native Village of Tatitlek

In addition, Appendix A of this report documents many cases of collaboration that are not facilitated by a neutral third party but that advance USACE effectiveness at engaging disadvantaged communities to manage water resources.

4. Invest in science, research, and development to deliver enduring water-resource solutions

Delivering enduring water resource solutions requires effective engagement of many groups with different interests, cultures, and values. This report highlights many of the efforts to train USACE staff in effective collaboration techniques, including the use of new technologies to better engage more people. Such techniques include:

- Use of participatory geographic information system called Crowdsourc Reporter to engage communities in the Ala Wai Flood Risk management project in Honolulu
- Use of multiple virtual facilitation tools (polls, break-out rooms, and virtual collaborative whiteboard) and [Virtual 360 Room](#) to support information sharing for the interagency National Hurricane Program
- Development and publicizing best practices for use of hybrid meeting and tools such as use of the “private chat” feature in WebEx to document concerns that participants are not comfortable sharing with a group
- Use of new meteorologic and hydrologic technologies for flood forecasting to improve interagency flood fighting in Sacramento
- Use of online GIS to facilitate sharing and development of ecosystem solutions along the Mississippi with Memphis District.

5. Strengthen communications and relationships to solve water resource challenges

This report focusses on examples and successes of USACE building relationships and improving communication with the many communities, organizations, and people it serves. Understanding the breadth and variety of USACE successes in environmental collaboration and conflict resolution will help USACE work with its partners to solve water resource challenges.

Additional Areas of Collaborative Capacity Development

1. Centers and Programs that promote collaboration

USACE hosts several Centers and Programs that promote collaboration.

USACE funded (for the 14th year) *its Collaboration and Public Participation Center of Expertise* (CPCX) that serves as an ECCR focal point for the agency on training, technical assistance, information exchange, innovation and policy support on collaborative process, public engagement, conflict resolution, and risk communication. The interdisciplinary team of seven staff members supported CPCX for an equivalent of three to four FTEs. FY22 funding totaled about \$1.5 million.

The CPCX continued to manage and expand the >2500-person interdisciplinary Collaboration and Public Participation Community of Practice (CoP). CoP Workgroups supported a) collaborative

technology tool development and piloting, b) information exchange through webinars or brown bag training sessions, c) development of risk communication products and trainings, and d) environmental justice webinars and analysis.

CPCX and individual USACE Districts continue to identify, support, and train subject matter experts in ECCR through the District-level Public Involvement Specialist (PI Specialist) program. During FY22, the program increased significantly, designating five new members. PI Specialists increase district collaborative capacity by transferring skills via formal and informal training for staff and leadership. Total hours committed to public involvements of the 35 PI Specialists is equivalent to about 3-6 FTE. See Appendix B for further detail on this program's investments and accomplishments in FY22.

Further, eight division liaisons to CPCX synchronize activities of, and share opportunities for, the District-level PI Specialists within their region. Two of the eight members were newly designated in FY22. Total liaison efforts are equivalent to 1-1.5 FTE.

The *Tribal Nations Technical Center of Expertise* over this past year has collaborated or engaged with all 574 federally recognized tribes in the nation. The TNTCX maintains an IDIQ contract with 9 organizations experienced in working with Native American communities around the country who provide third-party neutral support. In FY22 TNTCX created and implemented a national Tribal engagement plan for the Air National Guard, developed a regional Tribal engagement plan for USACE Southwestern Division (SWD), and developed engagement plans for the Seminole Tribe in Florida; 10+ California Tribes; and 20+ tribes in Oklahoma.

The *Sustainable Rivers Program* (SRP) is a national partnership between USACE and The Nature Conservancy (TNC) to improve the health and life of rivers by changing dam operations to restore and protect ecosystems, while maintaining or enhancing authorized uses and other project benefits. At the end of FY 2022, SRP involved work in 23 USACE Districts and 7 Divisions. Individual projects affect 90+ USACE reservoirs in 44 river systems affecting approximately 12,069 river miles. Five new rivers were engaged in FY 2022 through extensive collaborative efforts with many stakeholders, including the Alabama River, Bois de Sioux River, Brazos River, Chattahoochee River, Gila River, Kanawha River, Lake Washington Ship Canal, Salt River, Trinity River, and Wabash River. The FY22 annual budget of \$5 million includes considerable funding to enable the collaboration and conflict resolution that are vital to the success of this program.

Silver Jackets is a state-led interagency program that promotes significant interagency collaboration on flood risk issues and supports ECCR activities. Silver Jackets teams across the country identify flood risk priorities and look across agencies for solutions. USACE funds Silver Jackets coordinator positions and provides funds through existing floodplain management services programs. Of particular note, Honolulu District made progress toward establishing new Silver Jackets teams in American Samoa and Commonwealth of the Northern Mariana Islands.

2. Designated staff roles throughout the agency

Each USACE District maintains Public Affairs staff, and some Districts also have specific Outreach Specialists to assist with stakeholder engagement and public involvement activities. Kansas City

District has been particularly successful at maintaining three full time Outreach Specialists (two in Planning and one in Project Management). All USACE Districts also host USACE coordinators of state-led interagency Silver Jackets teams, who share knowledge on flood risk and natural disasters to enhance response and recovery efforts.

3. Funding Contracts and Tools

Districts are securing access to facilitation through IDIQ contracts, and actively budgeting to implement the anticipated EJ Outreach and Engagement requirements. The Institute for Water Resources has maintained an IDIQ contract for many years that includes facilitation support. In FY22, this IDIQ mechanism enabled nine initiatives across USACE, wholly or partially for facilitation services, totaling more than \$3 million. Additionally, some districts are paying for accounts to access Collaborative Technology Tools. For example, Jacksonville and St Paul districts maintain accounts with Poll Everywhere.

4. Communication Planning

While Communication Plans are a requirement for most USACE projects, the Dam Safety's program has set targets to develop plans for each of the >700 projects in the next few years. Following training in previous years, several districts completed project and programmatic risk communication plans.

5. Memoranda of Agreement (MOAs) and Memoranda of Understanding (MOUs)

USACE promotes ECCR through multiple Memoranda of Agreement (MOAs) and Memoranda of Understanding (MOUs) with other agencies and non-governmental organizations. Of particular note in FY22, USACE used its MOA with the Udall Foundation's National Center for Environmental Conflict Resolution to access their support of a stakeholder assessment as part of the Columbia River Treaty review. After extensive collaboration with partners, Huntington District established the Barker House Property Conveyance and Memorandum of Agreement. This MOA enables the district to work with partners on specific mitigation items for compliance under Section 106 of the National Historic Preservation Act and fulfillment of requirements outlined in WRDA 2020.

- b. Please describe the trainings given in your department or agency in FY 2022. Please include a list of the trainings, if possible. If known, please provide the course names and total number of people trained. Please refer to your agency's FY 2021 report to include ONLY trainings given in FY 2022. **If none, leave this section blank.**

NATIONAL EFFORTS

In FY22, CPCX helped deliver courses in person and virtually, and greatly increased the frequency of webinars. Trainings included:

- 8 formal courses
- 2 event presentations
- 19 webinars
- 1 journal publication
- quarterly newsletters emailed to the Collaboration and Public Participation Community of Practice (CPP CoP)
- daily emails full of resources for October's International Facilitation Week distributed to about 2500 members

Webinar participation averaged 210 attendees each, for a total of approximately 4000, and 220 students graduated from the courses. The target audience was USACE staff for most of these activities, although interagency partners participated as well.

CPCX FY22 National Trainings	Attendees
CPP CoP-hosted webinars including Virtual Engagement, Sustaining the Team, Environmental Justice, ECCR Cases, Communicating Risk, Hybrid Meetings (11 webinars)	2893
Dam and Levee Safety Stakeholder Communication Coaching calls (4 webinars)	553
Crowdsource Reporter research findings (2 webinars)	255
Planning CoP webinars on Interest-Based Negotiation and Conflict Resolution	300
CPP CoP Newsletter and International Facilitation Week Emails	~2500 each time
Effective Communication for Formerly Utilized Defense Sites (FUDS 102)	14
Public Involvement – Communication (PROSPECT 091; 2 sessions)	59
Risk Communication & Public Participation (PROSPECT 104; 2 sessions)	57
Public Involvement and Teaming in Planning (PROSPECT 407; 2 sessions)	60
Collaboration and Conflict Transformation in Multi-Party Processes (ALC3199 – interagency with USFWS)	30

REGIONAL EFFORTS

CPCX hosted an annual training, Collaboration with Native Nations and Tribal Consultation, for the Public Involvement Specialists delivered virtually in Nov-Dec 2021.

South Pacific Division hosted a workshop for their National Flood Risk Management Program staff. The workshop included topics on environmental justice action planning and tribal program visioning.

Northwest Division hosted a workshop given by EPA and CEQ to increase awareness of environmental justice issues and demographics tools.

A new Project Manager in Louisville District gained on-the-job training in public participation and facilitation skills through mentorship from the Outreach Coordinator / Public Involvement Specialist. Together they hosted several public workshops that built District capacity for similar future efforts.

Many individual staff members also attended external trainings in facilitation, risk management, public participation, and environmental collaboration.

3. ECCR Case Example

Using the template below, provide a description of an ECCR case (preferably **completed** in FY 2022). If possible, focus on an interagency ECCR case. Please limit the length to **no more than 1 page**.

Name/Identification of Problem/Conflict: Post-Disaster Watershed Assessments, Honolulu District (American Samoa, Guam, Commonwealth of the Northern Marianas Islands (CNMI))
Overview of problem/conflict and timeline, including reference to the nature and timing of the third-party assistance, and how the ECCR effort was funded.
Three post-disaster watershed assessments were authorized in July 2019 by the Additional Supplemental Appropriations Disaster Relief Act. Watershed assessments rely on a high degree of stakeholder input and engagement. Facilitation was needed to gather input from partners and stakeholders across numerous watersheds and, in the case of American Samoa and CNMI, multiple islands. Pacific Ocean Division - Honolulu District (POH) brought in South Pacific Division (SPD) to help manage the workload and provide third-party facilitation services. The primary facilitators were the lead planners from SPD, who were not from the home district that might benefit from work identified in the Watershed Assessments. Facilitators remained neutral by focusing on listening to partner needs instead of advocating for certain USACE-centric solutions. Costs associated with stakeholder engagement from March to July were approximately \$70,000.
Summary of how the problem or conflict was addressed using ECCR, including details of any innovative approaches to ECCR, and how the principles for engagement in ECCR outlined in the policy memo were used.
Since all three projects kicked-off at the start of the COVID-19 pandemic, the team was forced to pivot to virtual-only engagement instead of extensive face-to-face engagement. The study teams addressed this challenge with specific efforts to collaboratively develop a resilience plan and sustain partner engagement throughout the project timeframe. Substantial effort toward culturally sensitive meeting planning design made the meetings productive, fun, and engaging.
Identify the key beneficial outcomes of this case, including references to likely alternative decision-making forums and how the outcomes differed as a result of ECCR.
Through the watershed assessments, USACE fostered positive working connections with partners in the Pacific. Following the successful completion of all three studies in FY22, Honolulu District is leveraging the partnerships built to possibly stand-up Silver Jackets teams in the territories.
Please share any reflections on the lessons learned from the use of ECCR.
Key lessons learned were the value of using diverse multi-media tools to keep virtual meetings engaging, including voting tools, ranking of options in real-time, asynchronous surveys, and follow-up phone calls. The team carefully crafted meeting titles to set the tone, e.g., instead of SWOT Analysis, referring to meetings as a “think tank.” Finally, the PDT included sufficient space in meetings for local experts to share their knowledge, and for a robust interdisciplinary and inter-party exchange of ideas.

Other ECCR Notable Cases

Briefly describe any other notable ECCR cases in FY 2022. (OPTIONAL)

This section includes additional notable ECCR cases from across the agency. Notable collaboration cases (without a neutral third-party) that were reported by the field as part of this data call can be found in Appendix A. Each USACE Division also specified their *most* notable case from the year, as indicated below or in the appendix. USACE employs both external and internal third-party neutrals to assist with a wide range of initiatives.

I. EXTERNAL FACILITATORS

Kentucky Lock Addition Project, Nashville District

For the Kentucky Lock Addition Project, USACE's Nashville District contracted with Virtual CEO (Guy Greco) to facilitate two formal partnering sessions during FY22. The first facilitated conversation was the initial partnering session between the District and the contractor, Thalle Construction. The second facilitated conversation was the interim partnering meeting, intended to:

- gauge progress from the initial partnering meeting,
- evaluate the health of the current relationship between USACE and the contractor, and
- suggest ways to increase collaborative effectiveness.

The facilitator surveyed the greater partnership team, analyzed the results, and provided an out-brief to the partnering champions and governance leads. The survey results indicated the partnership remains overall very healthy and provided several areas where the team can focus attention to further strengthen its relationships and effectiveness. The partnership concluded the meeting with a session focused on trending project risk areas. The next formal partnering event is tentatively slated for January 2023.

Brandon Road Interbasin Project, Rock Island District

The purpose of the Brandon Road Interbasin Project (BRIP) is to reduce the risk of upstream transfer of aquatic nuisance species from the Mississippi River Basin into the Great Lakes Basin through the Illinois Waterway while minimizing impacts to the Illinois Waterway. Risk reduction measures include installing barriers at Brandon Road Lock and Dam. The pre-construction engineering and design phase of the BRIP was initiated Dec. 29, 2020, when the State of Illinois signed a design agreement with USACE's Rock Island District. The project management plan includes establishing a formal governance structure which will be used to provide input and resolve conflict throughout the planning and construction of the project. Since the project's inception, USACE and its partners, the States of Illinois and Michigan, have collaborated in a variety of forums including three facilitated partnering meetings five design charettes, three navigation workshops, and additional engagements. The number and variety of collaborative efforts used during the course of the BRIP continue to reinforce the partnerships required to make the project successful. Involving the States of Illinois and Michigan, U.S. Fish and Wildlife Service U.S. Geological Survey, U.S. Coast Guard, and the navigation industry early in the design process has helped the design team identify potential roadblocks.

Willamette Valley System Environment Impact Statement (EIS) Endangered Species Act (ESA) Section 7 consultation, Portland District

USACE's Portland District is in the midst of a National Environmental Policy Act EIS and ESA Section 7 process for the continued operations and maintenance of the Willamette Valley System. This will identify major actions to address project effects on three fish species listed as endangered or threatened under the ESA. CDM Smith was contracted to help with the logistics, facilitation, note taking and authoring issue elevation forms (which are part of the interagency governance process under the Willamette Valley System EIS) for nine half-day workshops in 2021. These workshops are part of the interagency pre-consultation coordination between the action agencies and the USFWS and the National Marine Fisheries Service. Funding for this was through the Columbia River Fish Mitigation Funds. Total cost is about \$83,500.

Columbia River Treaty Domestic Infrastructure Study Stakeholder Assessment

USACE's Northwestern Division sought assistance from the National Center for Environmental Conflict Resolution (NCECR), to conduct a stakeholder assessment to understand infrastructure development plans along the Columbia River. Engagements with key parties are envisioned to be a substantial part of upcoming NWD workload. To better plan for the engagements, USACE, along with the U.S. Bureau of Reclamation (Reclamation), partnered with NCECR to identify interests and concerns in the basin related to stakeholder engagement, water management, and infrastructure. NCECR interviewed representatives from several federal agencies and prepared an assessment summarizing:

- the themes discussed
- desired objectives and outcomes
- concerns about proposed engagements
- potential barriers and other considerations
- engagement format suggestions

NCECR's assessment, completed in 2022, has advanced USACE's and Reclamation's preparedness to develop strategies and approaches for effective engagement processes and enhanced communications with stakeholders and key parties.

Middle Rio Grande Endangered Species Collaborative Program, Albuquerque District

USACE's Albuquerque District co-leads the Middle Rio Grande Endangered Species Collaborative Program, which is responsible for coordinating efforts among 16 federal, tribal, and non-federal signatories to restore endangered species habitat along the Rio Grande from the New Mexico - Colorado border to just above Elephant Butte Reservoir in southern New Mexico. The Program was initiated in 2000 and its longevity reflects the necessity of collaboration in dealing with complex water and species management issues. Improving the status of the endangered Rio Grande Silvery Minnow has proven particularly contentious, as the agencies have diverging interpretations of population and reproductive monitoring data, critical life history uncertainties, and water management needs. In FY22, Western EcoSystems Technology organized and began facilitating a Rio Grande Silvery Minnow Hypotheses Ad-Hoc Workgroup to attempt addressing these issues. The ad-hoc workgroup comprises

representatives from federal, state, and tribal agencies and non-governmental organizations. The group met several times in FY22 and is building a common understanding of critical questions that need to be answered to improve the minnow's conservation status. Ultimately this will lead to effective use of agency resources and a better conservation outcome for the minnow.

Spirit Lake and Toutle-Cowlitz Rivers Collaborative, Portland District

Representatives of the U.S. Congress, Cowlitz Tribe, and state and federal agencies expressed support for a collaborative approach to long-term sediment management and related issues through a series of meetings in FY22. The watershed-wide consortium is intended to benefit current and long-term planning efforts to address sediment and land management, public safety, and other important issues. These meetings, facilitated by the Ruckelshaus Center, identified common interests, and desired outcomes, drafted basic operating structures, obtained preliminary commitments from involved parties, and identified funding options for the collaborative effort. The US Forest Service (USFS) and the Cowlitz County Council of Governments provided initial funding for the effort, which was a recommendation from a National Academies of Science, Engineering and Medicine study that was conducted a few years ago. USACE was one of the action agencies for that effort.

II. INTERNAL (USACE) FACILITATORS

CPCX:

Inner Harbor Navigation Canal Lock Replacement Study & Community Impact Mitigation Plan, New Orleans District

The Inner Harbor Navigation Canal (IHNC) Lock Replacement Study is a long-standing project to improve Navigation through New Orleans that has been opposed by local impacted communities. The New Orleans District worked with CPCX, and with Pelican State, a local public relations firm employed by the Gulf Inland Canal Association. The CPCX developed an engagement plan for key stakeholders of the IHNC Lock Replacement Project. Pelican State filled an essential role as a local contact and helped to identify key stakeholders in impacted communities and in the city of New Orleans. CPCX developed a series of semi-standardized questions that would be used to assess how stakeholders accept the IHNC project. Large-scale public meetings were very unsuccessful for this project in the past, so the New Orleans District, accompanied by a representative from Pelican State, conducted five very small, focused engagements between January and August in 2022. The District Commander was well informed of past project challenges regarding stakeholder engagement and carefully listened to stakeholder concerns. After the series of engagements, stakeholder acceptability increased slightly, and stakeholders were willing to continue a dialogue even if they were not in favor of the project. In FY23, stakeholder engagement will continue, informing impacted communities of project progress and gathering input on mitigation strategies to be implemented during construction.

Ala Wai Flood Risk Management General Reevaluation Study, Pittsburg District

The Ala Wai Flood Risk Management General Reevaluation study provides an opportunity to reduce flood risk and build a safer, more resilient, and economically viable community in Honolulu, Hawaii. The Ala Wai team has implemented a robust public engagement strategy to rebuild the relationship between USACE and the Honolulu community that was strained during previous iterations of the Ala Wai

study. USACE held a total of nine separate public meetings--eight virtual and one in-person--comprising a total of nearly 20 hours of content and engaging over 300 participants. In addition to the public meetings, USACE sought input from the public on problems and potential solutions through multiple online tools, and received over 150 ideas through Crowdsourc Reporter, an online tool that allows the public to provide location-specific input directly into an online map, both during and after public meetings. The team created a 'management measure tracker' that was frequently updated and posted to the study website, which allowed the public to follow progress related to all management measures and plan formulation in between public meetings. This detailed engagement has enabled USACE to develop and maintain a positive relationship built on transparency and trust.

2022 Hybrid National Hurricane Program Interagency Coordinating Committee on Hurricanes and Federal Program Partner Meeting, Baltimore District

The purpose of the Interagency Coordinating Committee on Hurricanes and Federal Program Partner Meeting was to aid the National Hurricane Program with its programmatic policy development, stakeholder coordination, funding prioritization, future direction, and technology integration for federal hurricane planning and operational support provided to state, local, and tribal governments. USACE worked closely with the Federal Emergency Management Agency and National Hurricane Program partners to develop and execute a three-day hybrid interagency meeting agenda. Stakeholder inputs throughout the meeting were used to refine the strategic direction of the Program's Hurricane Evacuation Study modernization efforts. Several virtual facilitation tools (polls, break-out rooms, and virtual collaborative whiteboard) were used to enable interactive stakeholder feedback during the meeting. A [Virtual 360 Room](#) was also established, which allowed emergency managers who were not available to participate virtually to access content during and after the meetings. The Virtual 360 Room was also used to create interactive break-out room engagements during the meeting. Virtual tools, such as collaborative whiteboards were necessary to ensure that information was captured during break-out sessions and made accessible to all attendees. A trained facilitator, in both in-person and virtual collaboration, was critical for ensuring the meeting was conducted effectively.

Port of Nome Community Information Meeting, Alaska District

The USACE Port of Nome Modification Project Community Meeting was held on February 9, 2022, to inform the public, tribal entities, and project stakeholders of the current project design, anticipated timeline for design and construction, hear any concerns/comments about the project, and address questions from the public. This meeting was held virtually so several locations in the community— such as meeting spaces in tribal corporation buildings— were made available to participants that did not have internet access. A challenge with this project is concern within the community about access to subsistence resources within the vicinity of the project area. Having an outside Alaska District facilitator co-facilitate the meeting allowed the local facilitator (the Alaska District tribal liaison) to maximize the meeting time through identification and understanding of key community and tribal concerns. Local leaders helped keep the meeting meaningful and productive. The outside facilitator led the presentation sections of the meeting, and the local facilitator led the community comments and questions. A successful outcome of this approach was the ability to plan additional meetings regarding contentious topics, including subsistence resource access. This proved a successful approach and allowed the meeting to continue productively on topic while mitigating a potential conflict with indigenous leaders in the community.

Civil Works Strategic Planning, Southwestern Division

CPCX continued its direct support to USACE leadership and partners through facilitation of a two-day workshop focused on the Civil Works Strategic Plan for USACE Southwestern Division. The hybrid workshop, hosted in Dallas, Texas and online, brought together regional and national leaders from USACE, and state representatives from Texas, Arkansas, Missouri, Oklahoma, and Kansas, for the first regional meeting of its kind. USACE Director of Civil Works provided opening remarks, and presentations from each of the five states helped paint a picture of current water use and future infrastructure needs across the region.

Tabletop Exercises, Los Angeles District

Direct services from CPCX extended to assist USACE Operations, through co-facilitating and coordinating two Tabletop Exercises (TTX) for the USACE Los Angeles District. Participants from local, state, and federal government, as well as community and non-governmental organizations, progressed through a facilitated set of scenarios to build capacity and relationships in advance of an emergency, and to better prepare for flood events in the area.

Future Climate-Resilient Coastal Flood Risk Reduction Workshop, San Francisco District

CPCX assisted USACE San Francisco District and the Port of San Francisco (the non-federal sponsor), by facilitating a workshop to envision future climate-resilient coastal flood risk reduction. The San Francisco Waterfront Study projects potential future sea level conditions out to the year 2140. Continued tentative support by CPCX may assist in public involvement efforts as alternatives are developed and proposed.

Madagascar Water Resource Management Conference, International Center for Integrated Water Resources Management

The Institute for Water Resources participated in a discussion on Madagascar's water challenges with six Malagasy ministries, the World Bank, UNESCO, and several U.S. government agencies. CPCX facilitated the two-day workshop in Antananarivo, Madagascar, which focused on developing practical steps Madagascar can take to improve its water security including identifying areas of collaboration between the Malagasy and U.S. Governments. Initial areas of collaboration identified included interagency coordination and data sharing, watershed protection, wetlands conservation and restoration, reforestation, integrated water resources management, rainwater harvesting, disaster early warning systems, crisis management, and land-use planning tools for water management. The deliverable will be a strategic plan for U.S. support for promoting water security in Madagascar. This event, sponsored by the United States Africa Command, is part of the U.S. Government's broader commitment to improving water and sanitation in Madagascar.

LOCAL USACE FACILITATORS:

Brunswick Harbor Stakeholder Meeting, Savannah District

Brunswick Harbor is a federal navigation project covered by the South Atlantic Regional Biological Opinion (SARBO). The National Marine Fisheries Service issued a revised SARBO to USACE in 2020. Since the issuance of the revised SARBO, the Brunswick Harbor navigation project has become controversial with state resource agencies and non-governmental organizations. These agencies and organizations are concerned about the protection of sea turtles listed under the Endangered Species Act. Savannah District committed to hosting annual meetings for Brunswick Harbor for five years. The first of these meetings was held in 2022 and was facilitated by USACE staff from Kansas City and St. Paul Districts. Setting the right tone was important. Neutral facilitators leading the meeting allowed Savannah District staff to focus on meaningful communication with the resource agencies. The facilitators fostered a relaxed and neutral tone that led to productive dialogue. The result was an honest and open discussion on Savannah District's monitoring efforts, current methods, and next steps for implementing the SARBO.

Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) Task Force Programmatic Retreat, New Orleans District

The CWPPRA Program consists of a task force that includes several federal agencies (USFWS, Natural Resources Conservation Service, National Marine Fisheries Service, the EPA, and USACE) and the Coastal Protection and Restoration Authority Board of Louisiana. Since program inception in 1990, more than 200 coastal restoration projects in Louisiana have been authorized, which are projected to benefit approximately 100,000 acres. The CWPPRA Task Force held a two-day workshop in New Orleans during July 2022 to discuss the evolution and future of the program in addition to discussing opportunities to make the program more efficient and engaging. The task force members engaged in lively round table dialogue with the help of a facilitator from the Omaha District. On the first day of the retreat, a funding status update was presented detailing the reconciliation of over 200 projects in several different financial systems. Each of the CWPPRA agencies was able to reflect on the successes of the program and propose topics to be discussed to shape the future of the program, including how to foster collaboration between the agencies. On the second day of the retreat, there were presentations on the backlog of projects ready for construction and on where to best spend limited funding. The task force members were encouraged to consider establishing criteria to address both of those issues. The retreat concluded with actionable items that were assigned to members of the CWPPRA committees and workgroups.

Minnesota Point Section 111, Detroit District

Minnesota Point, Minnesota is an approximately 6-mile-long strip of land separating Duluth-Superior Harbor from Lake Superior that has been impacted by severe erosion. Detroit District is partnering with the City of Duluth (the non-federal sponsor) to identify the cause of erosion and develop a solution that will prevent or mitigate further shore damage. An in-person, two-day planning charrette was held in March at the offices of the Minnesota Pollution Control Agency in Duluth. The PDT used the "Circles of Influence" method to determine which categories of stakeholders would be invited to the charrette. When representatives of groups not initially invited expressed interest in attending, the facilitator (Pittsburgh District's Public Involvement Specialist) and USACE's Planning Branch Chief worked with the organizations to identify a solution for attendance that would satisfy all parties. The inclusion of interested parties and attention to objective process and structure of the charrette enabled the attendees to develop a shared vision for the study and productively begin the first steps of the study process. When starting this study on a topic that has been rife with past conflict, a third-party facilitator

was helpful to begin establishing the trust of participants in the process. However, it would have been even more beneficial for a third-party neutral facilitator to have been agreed upon by all parties, instead of being selected by USACE and the project partner. Because the facilitator wasn't agreed upon by all parties, it was prudent of the facilitator to remain as objective as possible throughout the process.

Nationwide Permit 27 for Removal of Group Camp Dam, Pittsburgh District

When making permit decisions, USACE regulatory specialists must often meet and collaborate with other government and citizen entities to ensure that proposed projects are compliant with relevant regulations and will not adversely impact the public. One example of this in FY22 was a permit decision on a proposal to dewater Group Camp Lake and restore a free-flowing stream in the Raccoon Creek State Park in Beaver County, PA. Group Camp Dam (1938) was likely first built by the Civilian Conservation Corps (CCC). The state historic preservation office informed USACE that demolition of this structure built by CCC constituted an adverse effect because contributions by CCC during the Great Depression era have significant government, social history, and landscape architecture importance. After meetings with the preservation office and the applicant, USACE and the state determined that a memorandum of agreement (MOA) might enable the project to proceed while mitigating the removal of a historic structure. Pittsburgh District's Regulatory Specialist facilitated the MOA development process with recognized tribes and Nations, local historical societies, and archaeological interest groups. The Independence Conservancy and Beaver County Historical Research & Landmarks Foundation's input proved valuable to ensure Beaver County visitors could learn about the historic significance of this area. Final authorization for this project under Nationwide Permit 27 came with a special condition that the removal work must adhere to the conditions included in the signed MOA that the parties established to mitigate for the project's effect on the historic structure.

Navajo Nation Flood Risk Prioritization Project, Sacramento District

The Sacramento District (SPK) Flood Risk Management Program (FRMP) team hosted a series of three virtual meetings to establish the Navajo Nation Interagency Coordination and Collaboration Project. The purpose of these meetings (facilitated by the tribal liaison from Sacramento District) was to identify and discuss the highest priorities related to flood risk within Navajo Nation. The kickoff meeting was held virtually in March 2022. There were 65 participants in attendance, representing more than 23 federal, state, tribal and local agencies. A second Navajo Nation Interagency Meeting, held in July 2022, brought together representatives from five agencies (Navajo Nation Department of Water Resources, USACE, FEMA, USDA-NRCS, and Bureau of Reclamation) to share their efforts in improving flood risk management and water resources issues throughout Navajo Nation. A third meeting in November 2022 provided a platform to discuss agency priorities, resources, and constraints and to develop solid next steps to enhance collaboration. The goal of these workshops is to improve collaboration, synchronization of efforts, and enhanced outcomes of floodplain management planning and implementation efforts in Navajo Nation. This project received \$15,000 of Silver Jackets coordination funding to be divided across three USACE districts with areas of responsibility overlapping with Navajo Nation.

Flood Fight Exercise, Sacramento District

The Flood Fight Exercise was held from November 9-10, 2021, after five months of planning and preparation. The objective of the exercise was to foster collaboration and relationship building within USACE Divisions and between USACE, DWR, and observers to increase flood fight readiness capabilities. Fifty-four participants attended from USACE, the California Department of Water Resources, FEMA, and National Weather Service. The Natural Disaster Program Manager from Sacramento District facilitated the workshop. Day 1 consisted of a discussion-based exercise with presentations from USACE Emergency Management and DWR on authorities, programs, activation, roles, and responsibilities. NWS presented on the weather outlook for the upcoming winter season and led a debris flow discussion. Day 2 of the exercise consisted of a flood fight drill where the flood fight team conducted mock levee inspections and completed inspection reports. During the drill, the sandbag machine, Freeboard App, and unmanned aerial systems equipment were displayed. Following the drill, participants received a tour of the Emergency Command and Control Vehicle and participated in an engaging discussion on the 2017 flood event. Networking with partners was a major benefit which will ultimately increase SPK flood fight capabilities. The exercise improved personal readiness and encouraged participants to be prepared for future flood fight events. The workshop cost \$55,000.

[Tijuana Bi-National Dam Safety Tabletop Exercise Planning, South Pacific Division](#)

A catastrophic dam failure in the Tijuana River Watershed could easily overwhelm local emergency response capabilities in the U.S. and Mexico. In FY22, USACE began planning a tabletop exercise to test cross-border communication, validate the Barrett Dam Emergency Action Plan and Emergency Response Plan, and gain an understanding of bi-national disaster response capabilities with counterparts in Mexico. This was USACE's first binational and fully bilingual emergency response and preparedness tabletop exercise. Preparation took several months and involved building relationships with numerous agencies, key dam personnel, first responders and emergency operation centers from California, Mexico, and other entities involved in a possible dam failure. Albuquerque District, who had no emergency response or planning responsibilities in the watershed so was considered neutral, led the facilitation team. As preparation for the tabletop exercise, a "meet and greet" meeting was held between Mexico and USA to introduce the tabletop exercise purpose and scenario, allow people to introduce themselves, practice the translations, and ensure the technology was working for everyone. The months of preparation resulted in building relationships and trust. Beyond setting the stage for a successful tabletop exercise, a long-term bi-national work group was created for risk communication and emergency preparedness where none had existed before. People now know each other and who to contact in the event of an emergency. The process of building this flood risk preparedness group streamlined communication, preventing future lives lost.

[Salton Sea Management Program Regulatory Program Public Meetings, Los Angeles District](#)

Since 2021, the Los Angeles District Regulatory Division has been working collaboratively with the State of California and five other federal cooperating agencies on the preparation of an environmental assessment for NEPA compliance to support federal actions related to the State's Salton Sea Management Program (SSMP) 10-Year Plan. As the lead federal agency, USACE has led regular cooperating agency meetings and initiated programmatic consultations, including the section 106 National Historic Preservation Act process with the State Historic Preservation Office. USACE is also coordinating with 27 Indian tribes to execute a programmatic agreement. The District's Public

Involvement Specialist acted as the third-party facilitator and helped ensure a positive outcome for three virtual public meetings with the State. Due to the high percentage of Spanish-speakers in the region, USACE distributed public notices with Spanish language translation, and interpreters were used during the meeting on a separate Spanish language channel. The facilitator ensured the team was prepared for as many different questions and concerns as possible through development of frequently asked questions, while gaining an understanding of the range of potential stakeholders and their concerns. The facilitator made suggestions for the presentation and the talking points for ease of comprehension, which was a challenge because of the highly technical and complex regulatory review process. The goal of the meetings was to ensure the public, tribes and stakeholders were aware of the project and federal regulatory process, in order to obtain feedback during the public comment period.

Craig Navigational Improvements G2G and Tribal Engagement, Alaska District

The Craig Navigational Improvements project is a proposed 1,933-foot breakwater to accommodate 145 vessel berths for the town of Craig, Alaska. Alaska District received a government-to-government consultation request from the Craig Tribal Association in October 2021 to discuss the tribes concerns regarding the project. USACE met with tribe in formal consultation in November 2021 and March 2022. USACE then received a letter documenting the tribe's concerns of insufficient consideration of cultural and historic resources, including their socio-economic status and their reliance on subsistence fishing. Upon receipt of this feedback, the Alaska District put the project on hold and created a validation report. The validation study focused on capturing the concerns and opening government-to-government engagement., The impacts and concerns were reviewed for their scale, type, and location through a series of engagements during FY22 facilitated by Alaska District's tribal liaison. The district made a full effort to see, hear, and understand the concerns, and to prepare these findings for distribution in the validation report in 2023. Lessons learned include engaging with tribes early and throughout the life cycle of the project. The cost of the validation study significantly increased the total project cost.

Akutan Harbor Improvements Feasibility Study (Tribal Partnership Program) Public Meeting, Alaska District

This public meeting planning charette for the Akutan Small Boat Harbor Feasibility Study was held in the remote community of Akutan, a small island in the eastern Aleutians of Alaska. This was an in-person meeting and key outcomes included obtaining invaluable first-hand information from community members about local weather patterns, population trends, use of local facilities, and community perception about the proposed project. An outside facilitator from another USACE District was helpful to take the pressure off the team at the meeting and allow them to pay close attention to the attendees and ask important questions. The outside facilitator also asked important big-picture clarifying questions not immediately apparent to the detail-oriented project team. The facilitator's past experience at Alaska District and familiarity with Alaska Native communities and cultures was key to the success of this event.

Robe Lake CAP 206 Planning Charrette, Alaska District

The Native Village of Tatitlek is the local sponsor for POA's first ecosystem restoration project. The planning charrette for the Robe Lake study was a 1-day workshop with critical project stakeholders,

funded by the project. The charrette was originally planned to be in-person in Valdez, Alaska, with an online component for those participants who were unable to travel. Because of cancelled flights, the meeting format was changed to a hybrid-model of in-person and online. This was accomplished because of skill sets acquired during the COVID-19 pandemic, conducting virtual and hybrid meetings in remote locations in Alaska. The facilitator, Alaska District’s tribal liaison, negotiated different engagement styles in the virtual space by assigning the project manager to an in-person facilitator role, and focusing attention on the virtual participants which included local, tribal, and state governments, and other agencies. A challenge is that tribal leaders did not wish to speak publicly about their concerns. Through careful organization of participant responses and using the “private chat” feature in WebEx, the tribal liaison was able to document these concerns and use them to develop initial measures for an eco-system restoration project.

4. ECCR Case Number & Context Data

Context for ECCR Applications:	Case Numbers
Policy development	_____
Planning	17
Siting and construction	2
Rulemaking	_____
License and permit issuance	1
Compliance and enforcement action	3
Implementation/monitoring agreements	2
Other (specify): _	
TOTAL # of CASES	<u>25</u>

Appendix A: Non-facilitated Collaboration Cases

USACE proactively addresses potentially controversial environmental issues associated with its projects and programs as early as possible to resolve these issues before they become significant conflicts. Across all Civil Works programs and missions, including navigation, flood risk management, hydropower, water supply, emergency management, regulatory, and ecosystem restoration, USACE promotes and benefits from collaborative working relationships with agency and stakeholder partners.

When engaged in planning and project coordination activities, USACE districts request early involvement of appropriate federal, state, and local natural resource agencies, thus establishing a positive and collaborative working partnership. As part of this process, frequent interagency working meetings are conducted to discuss and resolve stakeholders' concerns. This approach also improves communication and relationships within the USACE organization. Improved communication, both internal and external, cultivates a working environment that improves data collection and sharing, improves mutual understanding of USACE and external agency processes, and ultimately leads to better, more sustainable outcomes. While collaboration cases are no longer required as part of the ECCR report, USACE finds value in collecting this information as a way to share best practices and promote effective collaboration across the agency.

Great Lakes and Ohio River Division

[Buffalo District: Emerald Shiner Demonstration Project Stakeholder Workshop](#)

In October of 2021 the USACE team and partners collaborated on the planning and execution of a virtual workshop to celebrate the Emerald Shiner Demonstration Project at Broderick Park in Buffalo, NY. One goal of this stakeholder workshop was to draw a place-based connection to academic research, non-profit advocacy, federal support, public recreation, and cultural significance. Another goal was to provide a novel solution to an ecological problem: resolving a barrier to fish passage in the Niagara River. Representatives from the Friends of Broderick Park presented the history and local significance of the park, including its importance to fishermen and to those who value the site as a final crossing point on the underground railroad. Collaborating Agency staff, academic researchers and the USACE team informed community stakeholders about the projects benefits and temporary impacts during construction. Technical content was designed to appeal to a general audience of local residents and anglers, as well as to practitioners with interest in fish passage, Great Lakes restoration, and Areas of Concern. Celebrating successes within the region enhances commitment to future positive, collaborative efforts. The place-based approach appealed to multiple users of the resource and provided an avenue through which people from various walks of life engaged with the resource and the project.

[Buffalo District: Phosphorus Optimal Wetland Demonstration Stakeholder Workshop](#)

In May of 2022, the Buffalo District facilitated a collaborative field workshop at the Phosphorus Optimal Wetland Demonstration site in Defiance, OH to address harmful algal bloom development in Lake Erie caused by excess nutrient loading in Great Lakes tributaries. The P-Optimal Wetland demonstration project seeks to develop a novel approach to reduce nutrient loading in Great Lakes tributaries by engaging a diverse array of stakeholders. Workshop attendees included federal (USACE, EPA, U. S. Geological Survey), state, and local government agencies, non-profit organizations, agricultural interests, academic institutions, private landowners, and media. The goal of this collaborative workshop was to share the results of the demonstration project to date, and foster dialogue and stakeholder investment that could result in better sharing and replicating the techniques and technologies developed at the workshop.

Buffalo District: Vermilion Harbor East and West Pier Repairs

The Buffalo District invited stakeholders to discuss Vermillion Harbor East Pier Repair. Stakeholders expressed their concerns with the final design and construction of the east pier, noting that they perceived the final construction and the stone alignment had resulted in a new navigational hazard. The construction office provided as-built drawings of the recently completed east pier to aid the discussion. The project manager described the schedule for the west pier repair. The stakeholders requested that the construction on the west pier minimize navigational hazards. The information collected at the meeting was provided to the design team at the Buffalo District Office for their consideration during development of the west pier construction documents.

Buffalo District: Little Sodus Harbor West Pier Construction Access Coordination

The Buffalo District and the Village of Fair Haven held a public meeting to receive input on the construction of two concurrent projects (USACE's and the Village of Fair Haven's NYS REDI project) that will use the West Barrier Bar park for access during construction. The sponsors of the projects wanted to communicate the need for both projects to use the same access point, and to set expectations about construction before it began. At the initial meeting each contractor explained their plan, followed by a question-and-answer period. The primary objective of this initial meeting and the subsequent monthly meetings was to build transparency and project awareness. The meetings also provided opportunities for attendees to comment on construction decisions, such as access route alignment.

Chicago District: Lake George Branch - Middle Section Remediation

The Lake George Project is a collaboration between EPA, Hammond, IN and East Chicago, IN. This community is an environmental justice community. The project is focused on sediment remediation in the Lake George Branch Middle Section to protect human health and the environment. This cleanup is being conducted by the EPA, East Chicago Waterway Management District, and Atlantic Richfield Company and BP Products North America Inc. through a Great Lakes Legacy Act partnership. To reach as many residents as possible, the Project Delivery Team (PDT) prepared a flyer, ran a newspaper advertisement, and held a public engagement at one of the monthly Citizens Advisory for Remediation of the Environment (CARE) committee meetings. At the public meeting, some residents indicated that they had not been aware of the project and would have appreciated an opportunity to review the project materials before the meeting. A lesson learned from this engagement was to share information with the public before meetings so that community members could be prepared to engage. The PDT and partners discussed a more inclusive outreach plan moving forward. Additionally, Indiana Department of Environmental Management stated that they would include a Hammond resident on the CARE committee because the committee discusses current and upcoming projects at their monthly meetings.

Detroit District: Woodtick Peninsula Section 204 Beneficial Use of Dredged Material for Ecosystem Restoration

The Detroit District (LRE) worked with Federal Tribes, the State of Michigan State Historic Preservation Office (SHPO) and the Department of Natural Resources (DNR) to develop and conduct an archeological survey of the Woodtick Peninsula project area, evaluate, and interpret the findings, and develop next steps for compliance with Section 106 of the NHPA. LRE ensured that the consulting parties had full participation in and ongoing knowledge of the Section 106 process by involving them early in the development of the study, including the survey design. LRE quickly engaged the consulting parties to resolve issues as they arose during the survey so

that the survey contractors could move forward. When human remains were identified during lab analysis, LRE quickly convened the consulting parties to discuss how that would impact the remaining survey tasks, and how to better identify archeological sites and handle any future human remains discoveries. LRE updated the Unanticipated Discovery Plan to incorporate consulting parties concerns and added a section addressing unanticipated discovery occurrences in a lab (this was a first event of its kind for LRE). By engaging with the consulting parties as soon as possible from the initial survey design, LRE has been able to address issues much more quickly as the consulting parties are already up to speed on the survey and the project. Additionally, Detroit District has been able to adjust the survey to fit consulting parties' questions and concerns in real time while in the field, instead of having to develop another survey.

[Huntington District: Barker House Property Conveyance and Memorandum of Agreement](#)

Huntington District, the Ohio State Historic Preservation Office, the Advisory Council on Historic Preservation, and the Friends of the Joseph Barker, JR House entered into a Memorandum of Agreement (MOA) for compliance under the National Historic Preservation Act (NHPA) related to the transfer of ownership through Section 356(j) of WRDA 2020. Planning and District Staff facilitated coordination and communication with the various stakeholders and resource agencies. USACE reached consensus with the various entities and agencies through timely coordination and collaboration. USACE continues to work with partners on mitigation items outlined in the MOA for compliance under Section 106 of the NHPA and fulfillment of requirements outlined in WRDA 2020. This MOA is the mechanism to fulfill Section 106 requirements under the NHPA and it benefits the consulting parties and the public because this agreement allows the historic structure to remain preserved.

[Louisville District: Eastern Kentucky Flood Coordination](#)

Eastern Kentucky experienced devastating floods in late July of 2022 resulting in a federal disaster declaration for over 20 counties with billions of dollars in damages and 43 lives lost. The Kentucky Silver Jackets Team (Silver Jackets) met less than a week after the flooding to coordinate resources, response efforts, and data collection. They also discussed programs and authorities that may be available to better manage flood risk in the future. The flooding was a major topic of discussion at the Kentucky Association of Mitigation Managers Conference. Silver Jackets also reached out to local affected areas regarding USACE programs and authorities and disseminated information relating to regulatory permitting that may be needed in the cleanup, response, and recovery process. We discovered a lot of confusion and misconceptions held by the general public about flood mapping. Therefore, a flood map summit was held in Louisville, KY with representatives from the U. S. Geological Survey, the National Weather Service, the Federal Emergency Management Agency USACE, and the Commonwealth of Kentucky to discuss agency capabilities, as well as differences between the types of flood maps that each agency produces (for example: flood warning maps, flood inundation maps, regulatory flood insurance rate maps, etc.). Through this collaboration a new Floodplain Management Services Project was developed for Wayland, KY in the Huntington District, and efforts are underway to start a large-scale Planning Assistance to States effort that will look at the flooding and examine appropriate structural and non-structural flood risk management efforts across the region.

[Louisville District: Louisville District Silver Jackets Program](#)

The Louisville District continued collaborating with other federal and state agencies, as well as non-profit organizations and universities through the Silver Jackets Program. One key area of collaboration by the Kentucky Silver Jackets team was a special meeting held within days of the flooding in Eastern Kentucky to coordinate resources, data collection, and response efforts. Over 60 people were online (which is a record for

Silver Jackets participation in Louisville District) for the meeting, which highlighted the longstanding partnerships developed through Silver Jackets in Kentucky. Data sharing and successful collaboration on sharing resources continued for various flood risk management related topics including floodplain issues, community assistance, fluvial erosion, low head dam removal, and other topics.

[Louisville District: Barren River Lock and Dam 1 Removal](#)

The Louisville District (USACE) and the USFWS, with The Nature Conservancy as a supporting partner, successfully removed Barren River Lock and Dam 1 (BR1) on the Barren River in Warren County, Kentucky in September 2022. The dam was in an active state of failure, creating a pooled condition in the river with decreased oxygen levels, increased sediment, and higher temperatures—conditions that are detrimental for aquatic life and the overall health of the river. The dam also was a barrier to recreational boat traffic and presented a public safety hazard because of its remote location and deteriorated condition. The USFWS Kentucky Field Office, with engagement from the USFWS Southeast Aquatic Restoration Team, took the lead on dam removal. USACE and the USFWS established an Inter-Agency Agreement, which allowed for USFWS to expeditiously remove the dam while the dam remains in USACE ownership. Federal legislation, under the Water Infrastructure Improvements for the Nation Act was signed into law in 2016, deauthorizing the lock and dam site from the USACE inventory and directing its removal.

[Nashville District: Waverly, Tennessee/Humphreys County Flood Recovery & Mitigation Task Force Hydrology Sub-committee](#)

In August of 2021, Waverly, TN experienced a devastating flood event in which over 20 inches of rain fell within a 24-hour period. The flooding resulted in 20 deaths, hundreds of homes and vehicles destroyed, pets lost, and businesses and schools severely damaged. A Presidential Disaster Declaration was made, and a State of Tennessee Task Force (Task Force) formed to assist in recovery and reconstitution. The Nashville District (District) held numerous meetings to identify engineering solutions to reduce flood risk and to serve the Task Force with technical and engineering information. From these meetings, the District has been working toward developing a flood preparedness map book for inclusion in the Task Force report to the Governor of Tennessee. The map book will help Waverly, TN and Humphreys County understand the flood event that occurred. It can also be used as a tool to direct mitigation efforts after future flood events. The sub-committee has focused on recommendations to the Task Force on measures that could serve as early warning signals of future flooding.

[Nashville and Memphis Districts: Tennessee State Partnering Meeting](#)

On 28 APR 22, the State of Tennessee and USACE, both Nashville and Memphis Districts, jointly hosted an in-person Tennessee Partnering Meeting for the first time since 2018. Seventy attendees representing 20 organizations participated in a day-long collaborative and cooperative information exchange to develop mutual water resource goals that would enhance the quality of life for Tennesseans. The partnership is developing the concept of state-wide task forces that have the agility to quickly respond to incidents and that can proactively plan measures to mitigate potential damage from future incidents. All the agencies expressed enthusiasm to collaborate and communicate on shared concerns and goals, which was exemplified in the signing ceremonies of the various agreements. A key part of the partnering meeting was the Memorandum of Agreement signed by federal and state partners that re-affirmed their commitment to each other in moving forward as a unified body in jointly solving the water resource challenges of Tennessee.

[Nashville District: Center Hill Water Control Manual Update](#)

The water resources at Center Hill Dam have many competing interests among stakeholders and the public, and updates to the Center Hill Water Control Manual (WCM) could impact both stakeholders and the public-at-large. The Nashville District gathered input from stakeholders and the public at two events: one for the stakeholders, and one for the public. Over 20 stakeholders representing seven different agencies attended the stakeholder meeting. The public event saw over 50 people attend. The activities for both meetings were centered on providing presentations on the history and importance of the Center Hill WCM, the NEPA process, and of soliciting comments and input from both groups.

[Pittsburgh District: West Fork Co-Op Section 219](#)

The USACE Pittsburgh District worked closely with the communities of Gore, Dawmont, Arlington, and Glen Falls in West Virginia to fund and construct a septic system using non-traditional approaches. The communities formed the West Fork Co-op to manage and own the project, which required a waiver because the Section 219 program requires that the local project sponsor cannot be a single individual or a non-profit entity. The completed project will reduce the raw sewage loading to the West Fork River and provide a cost-effective solution to the communities comprising the West Fork Co-op.

Mississippi Valley Division

[Vicksburg District: Channel Improvement Program Interagency Meeting](#)

March 29th, 2022, the Vicksburg District hosted their annual Channel Improvement interagency meeting to discuss the upcoming Mississippi River dike and revetment work. These annual meetings have streamlined coordination efforts related to channel improvement activities and have set up a framework where separate coordination with individual agencies is no longer required. This coordination has resulted in significant cost savings, and the team approach has allowed for increased collaboration on Mississippi River conservation and restoration efforts across agency and state boundaries. A direct result of these meetings was a collaboration between USACE and the USFWS on a conservation plan for the federally endangered interior least tern, pallid sturgeon, and fat pocketbook mussel in the lower Mississippi River, pursuant to Section 7(a)(1) of the Endangered Species Act. This conservation plan was instrumental in USACE receiving a programmatic non-jeopardy biological opinion for channel improvement activities for the entire 953 miles of the lower Mississippi River covering three USACE districts.

[Memphis District: Hatchie – Loosahatchie Mississippi River Ecosystem Restoration Study](#)

In late FY 21, the Memphis District hosted a series of planning charrettes with a large interagency team including over 50 representatives from over a dozen federal and state agencies and non-governmental organizations for a complex ecosystem restoration study on a 39-mile reach of the Mississippi River bordering Arkansas and Tennessee. During these planning charrettes, the interagency team identified problems and conceptual-level opportunities within the study area. However, there was a need to move from conceptual ideas to site-specific measures. To facilitate data sharing and the development of measures, the PDT set up a GIS platform using ArcGIS Online (AGOL) comprising a compilation of pertinent biological, hydrological, elevational, and other geospatial data provided by dozens of members of the interagency team. Sub-teams of experts were created from the interagency team and the large number of participants around the country who had expertise in wetlands and other aquatic habitats, public lands, recreation, etc. the sub-teams met throughout FY22 to move

from conceptual-level ideas to site-specific measures they identified on the landscape using AGOL as their main tool. The team was able to develop over 200 potential ecosystem restoration measures. AGOL was also used during the public scoping process to communicate these potential measures; the feedback received from this process helped develop the project alternatives. AGOL was a valuable data sharing tool and did not require any additional study costs, as the technology is readily available for use.

Memphis District: St. Francis Basin Civil Works Projects Mitigation

In mid to late FY 22, the Memphis District (District) (including Project Management, Real Estate, Public Affairs, and Environmental Compliance divisions) worked with local levee districts and local landowners to identify potential willing sellers so that the District could complete its outstanding mitigation requirements for past Civil Works projects in Missouri as part of the St. Francis River Project. Upon identification of potential willing sellers, an interagency team comprising federal and state agencies (including U.S. Fish and Wildlife, U.S. Environmental Protection Agency, Missouri Department of Natural Resources, and Missouri Department of Conservation) identified tracts of land that would be appropriate for mitigation. The team conducted site visits, online discussions, and teleconferences to discuss suitability of proposed lands. Several tracts were identified, and in early FY 23 the District initiated the process to purchase these lands. As the purchase of these lands move forward, the same interagency team will develop site specific plans for mitigation. As a result of this interagency team effort, the Memphis District will erase the existing mitigation debt and will have mitigation available for future Civil Works Projects on the St. Francis River in Missouri.

Memphis District: Bayou Meto Basin, Arkansas GRR

USACE has been working with an interagency team consisting of state and federal resource agencies with responsibilities within the state of Arkansas related to the Bayou Meto Basin Record of Decision, signed in 2007. This interagency team was established during the development of the Bayou Meto Basin project and was instrumental in developing environmental features as well as helping the project avoid or minimize impacts to the natural environment. In 2022, the team assisted efforts to acquire appropriate areas to mitigate for unavoidable project impacts to backwater fishery habitat and engaged in minimizing project impacts to a bayou in relatively good condition for the basin, considering the level of agricultural development in the area. Expected outcomes include minimizing impacts to the cypress and oak trees that border the bayou, through approaches that may include using amphibious machinery to remove blockages and woody debris.

Memphis District: Grand Prairie Area Demonstration Project

During FY 22, the Memphis District worked with the non-federal sponsor, state and federal resource agencies, and the National Audubon Society (contractor) to monitor a 30-acre tract of native prairie grass that was planted to offset impacts to upland habitats monitoring measures helped to ensure that the prairie grasses continued to establish successfully and to treat invasive species and woody vegetation so that the prairie grasses would become dominant. Native prairie grasses were also planted along a water pipeline right-of-way from the pumping station to the widened canal section. This tract was also monitored and treated as necessary. Federal and state resource agency representatives also worked with USACE biologists to assess the value of a mitigation tract near the White River which was flooded for an extended period after initial planting. The interagency team found that although the mitigation planting was largely unsuccessful, the volunteer tree species and other vegetation that developed in the tract was supporting an extensive array of wildlife species and was therefore largely successful from an ecosystem perspective.

St. Paul District: DMMP Program-level Programmatic Agreement and Pool 4 DMMP

The St. Paul District (MVP) is developing Dredged Material Management Plans (DMMPs) for Pools 3, 4, 5, 6, 9, and 10 of the Mississippi River. Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to consider the effects on historic properties of projects they carry out. To comply with Section 106, the USACE develops Programmatic Agreements (PAs) with State Historical Preservation Offices (SHPOs) and tribes. Realizing the workload involved in developing separate PAs for the six DMMPs, MVP took the opportunity to develop one PA that covers all DMMPs. This allows MVP to better clarify review procedures and improve consistency, consultation, and accountability in fulfilling its responsibilities to comply with Section 106. A programmatic PA eliminates the redundancy of executing several PAs with the same objective, reduces overall risk in the long term by streamlining the Section 106 process, lowers future labor costs, and strengthens our relationships with ACHP, SHPOs, and tribes. MVP initiated Section 106 consultation for the DMMP PA in September and October 2021 by sending letters to the SHPOs of Iowa, Minnesota, and Wisconsin; the ACHP; and 33 tribes. MVP then hosted an information webinar to begin the consultation process and established monthly workshops to develop the DMMP PA. The PA was finalized and executed on August 23, 2022. MVP used the PA to cover proposed activities identified in the Pool 4 DMMP report and established the process MVP will follow for compliance with Section 106 and to address any effects that could not be fully determined in advance of undertakings associated with the Pool 4 DMMP.

St Paul District Northmet Mine, PolyMet 401(a)(2) Hearing

In March 2021, the USACE suspended a Department of the Army Section 404 Clean Water Act (CWA) permit issued in March 2019 to PolyMet. The permit authorized the discharge of fill material into 901 acres of wetlands in association with mining a polymetallic ore deposit. The permit included conditions requiring actions to minimize effects on avoided waters, purchase wetland bank credits, and monitor for indirect effects. The permit suspension followed the Fond du Lac Band of Lake Superior Chippewa filing a lawsuit against the U.S. Environmental Protection Agency (EPA) and USACE, and the federal court's approval of EPA's request to reconsider the project's water quality effects on downstream waters under Section 401(a)(2) of the CWA. The EPA determined in June 2021 that the project "may affect" downstream water quality in the Fond du Lac Reservation and the state of Wisconsin. Fond du Lac notified USACE and EPA that the project "will affect" downstream waters in their reservation in August 2021 and requested that USACE conduct a public hearing. During FY22, USACE Regulatory coordinated extensively with the Fond du Lac Band and determined the hearing schedule with consideration for views from EPA, Fond du Lac, and PolyMet. Following the regulations at 33 CFR 325.2 and Part 327, USACE conducted a three-day CWA Section 401(a)(2) hearing, the first of its kind in the nation, from May 3-5, 2022, at Fond du Lac's facilities. St. Paul District Commander Colonel Karl Jansen was the Presiding Officer. USACE is reviewing information received during and following the hearing, including the EPA's evaluation and recommendations, submittals from Fond du Lac Band and PolyMet, and other public comments related to water quality impacts from the project to determine whether to revoke, modify, or reinstate the permit.

Rock Island District 2022 USACE/US Coast Guard Partnering Meeting

On 13 July 2022, the Rock Island District hosted a hybrid USACE and U.S. Coast Guard (USCG) Partnering Meeting in Peoria, IL with 34 attendees. Representatives from St. Louis, St. Paul, Chicago, and Rock Island USACE Districts met with representatives from USCG Sector Upper Mississippi River and Marine Safety Unit Chicago. The meeting was held in a hybrid format, with most participants joining in person and only a few participating virtually. Participants engaged in valuable discussions that promoted greater understanding of missions, roles,

and organizational chains of command, thereby enabling future collaboration. Each organization was given time to share information relating to its command and there were several opportunities for informal discussion between the two agencies. This meeting reinforced the strong partnership between the two agencies.

Rock Island District Lock and Dam 15 De-Watering Tours

In January and February 2022, the Rock Island District conducted several tours of Lock & Dam 15 while it was de-watered for maintenance. These tours provided the public, regional and congressional leaders, navigation and industry partners, and key stakeholders the opportunity to learn more about USACE and the operation of the Mississippi River locks & dams. Over 250 students and educators as well as over 650 employees, family members, and members of the public participated in the tours. The costs to the district included the labor of district employees during the planning, preparation, and execution of the event. The tours served as positive exposure for the great work by USACE team-members taking place every day behind the scenes and gave the District the opportunity to recruit future team-members of all disciplines.

Rock Island District: Cahokia Heights and East St. Louis, IL

The St. Louis District was asked by Congress to assist two high visibility disadvantaged communities, known as East St. Louis and Cahokia Heights, with their flooding and failing infrastructure problems. USACE was asked by City officials to assess various flood risk reduction and maintenance measures that may effectively reduce flood risk. We quickly determined that a storm sewer survey was needed, but the city did not have as-built drawings for the storm sewer system. The Illinois Department of Natural Resources – Office of Water Resources stepped-up and provided the needed survey, taking over 550 survey points over a three-week period, mapping the storm sewer system, and assigning a functional condition to each survey location. This survey will substantially improve USACE’s hydraulic modeling of existing conditions and improve technical recommendations for suggested flood mitigation measures. Two weeks into the flood hazard analysis, on 26 JUL 2022, the area sustained historic flash flooding with a 500-year rainfall frequency resulting in Presidential Disaster Declaration DR-4676-IL and displacing residents from approximately 100 homes. Federal agencies are working toward a full federal approach with a FEMA task force comprising the same members serving Flint Michigan. Collectively the federal, state, and local agencies, non-governmental organizations, Architectural & Engineering firms, legal interests, and the public have aligned to initiate delivery of project improvements.

North Atlantic Division

New York District: New York and New Jersey Harbor and Tributaries Study (HATS) (NAD’s Most Notable Case)

The New York and New Jersey Harbor and Tributaries study area encompasses tidally influenced areas within the New York metropolitan area, including New York City— the country’s most populous and densely populated city—and the six largest cities in the State of New Jersey. To incorporate effects beyond the traditional cost-benefit analysis, the team developed an Other Social Effects and Environmental Justice framework based on guidance from USACE’s institute for Water Resources. The framework was tailored to the study area’s local context using the expressed interests of the non-federal sponsors and New York District planners. The USACE assessment team engaged with subject matter experts from the NJ Department of Environmental Protection, the NY Department of Environmental Conservation, the New York City Mayor’s Office of Climate and Environmental Justice, and the New York City Health Department, to gather input on stakeholder and community concerns and priorities, and analyze the physical and mental health and safety, economic vitality, social connectedness, identity, social vulnerability and resilience, participation, and leisure and recreation in the

study area. The analysis examined public meeting attendance and participation and reviewed major themes from thousands of public comments collected during scoping and interim report public comment periods to characterize the concerns raised throughout the study process.

The draft report was released on September 24, 2022, and the team has been implementing the study's strategic communication plan, holding three successful virtual public meetings, and attending over 20 smaller engagements as invited speakers for state and local agencies, academic institutions, and non-governmental organizations. The District is also preparing multi-language informational flyers and brochures to advertise future public meetings and plans to have translation services and American Sign Language translators available at meetings, where appropriate. The meaningful discussions and collaboration with our stakeholders in 2022 leading up to the release of the draft report enabled the study team to "get the word out" better than ever.

[Baltimore District: Flooding in the District E-Learning Series](#)

The Watts Branch Flood Risk Management Study Report was completed by the District of Columbia Silver Jackets team in April of 2021 to identify flood risk in the Northeast neighborhoods of Washington, DC and to assess alternatives for reducing that risk. In FY21, the DC Department of Energy and Environment (DOEE) obtained grant funding to develop a series of video modules to educate the public about flood risk, nonstructural measures, blue and green infrastructure measures, and the results of the Watts Branch Flood Risk Management study. USACE worked closely with DOEE and its contractor in FY22 to help develop the [3 video modules](#) which synthesized the results of the study. In addition, [several additional flood risk awareness videos](#) were developed to help DC stakeholders better understand flood risk and risk management measures. Video modules were also broken into multiple parts to ensure that they were readily accessible and digestible for stakeholders. The modules were released on 23 June 2022, during the DC Flood Awareness Week. Using a videographer who was not involved in the development of the study helped maintain a neutral perspective.

[Montgomery Slough Habitat Enhancement Project Interagency collaboration](#)

The Montgomery Slough Habitat Enhancement Project addresses the 3-acre fish habitat mitigation requirement of the Upper Ohio Navigation Project, a Pittsburgh District mega project. The EIS for this project requires USACE to coordinate with the Pennsylvania Fish and Boat Commission (PFBC) and the USFWS Pennsylvania Field Office on the design of the 3-acre habitat mitigation project. Pittsburgh District initiated these efforts through a kick-off meeting with the agencies to discuss the circumstances of the Montgomery Slough (shallow embayment with little inflow or outflow, inability to obtain long-term access to riparian area due to private property) and potential habitat improvement options. Pittsburgh District also conducted a site visit with PFBC and USFWS at the Montgomery Slough to further develop potential habitat improvement options. Pittsburgh District then generated preliminary design and placement schematics for brush reefs at the Slough and provided PFBC and USFWS the opportunity to comment on those designs. Pittsburgh District obtained concurrence from PFBC and USFWS on the preliminary designs of the habitat enhancement project after incorporating the agencies' feedback. This project reached concurrence very quickly, likely due to the ability to obtain feedback from the agencies at a very early stage during mitigation design. These efforts were funded using the Upper Ohio Navigation Project funds.

Northwestern Division

[Walla Walla District: Federal Columbia River Power System \(FCRPS\) working group for the Dworshak Project \(NWD's Most Notable Case\)](#)

The Nez Perce Tribe, through a letter signed by the Tribal Chairman to the Walla Walla District (NWW) Commander in December of 2020 formally requested creation of a new FCRPS cooperating group under the system's National Historic Preservation Act system-wide Programmatic Agreement that would be specific to NWW and the Dworshak Operating Project and Reservoir (Dworshak) to further comply with the NHPA. NWW leadership supported the request and began the process of coordinating the new tribal coordination group with NWD in 2020, to include securing funding through the existing FCRPS Cultural Resources Program. Over the last two years coordination has involved the District Archeologist, the Regional Archeologist, the District and Division tribal liaisons, and multiple levels of District and Division leadership. The new coordination group includes the Nez Perce tribe, the Idaho State Historic Preservation Office, Bonneville Power Administration, and relevant NWD and NWW technical staff. The new enhanced coordination effort will ultimately result in increased effective NHPA Section 106 compliance, efficient management of sensitive cultural resources, and better long-term relationships with our consulting parties and tribal partners.

[Walla Walla District: Snake and Clearwater River Immediate Need Dredging Project](#)

During the scoping for this project in early 2022, the Nez Perce Tribe identified a strong interest in the potential for impacts to Pacific lamprey as a result of the proposed dredging action. Lamprey are a treaty resource and the Nez Perce Tribe actively supports lamprey restoration efforts upstream of the project area. As a result of comments received, the Walla Walla District (NWW) agreed to conduct surveys for larval lamprey that can reside in river sediments and conduct visual surveys for native mussel species. As the methodology employed by the contractor was not that recommended by the Nez Perce Tribe, they asked to join the contractor survey crew on the boat. NWW facilitated the cooperative effort and included the lamprey survey topic at a Government-to-Government consultation. Funding for the survey work is an operations and maintenance cost captured within anticipated budget constraints.

Coordination involved District biologists, the project manager, the contracting officer's representative, the tribal liaison, Office of Counsel, and multiple layers of leadership to support and coordinate the effort as well as the cooperation of a Pacific Northwest National Laboratories (PNNL), a USACE contractor. The USACE Office of Counsel was particularly helpful in assisting PNNL in addressing liability concerns and facilitated adding non-contractor tribal staff to the field activities. These actions resulted in successful surveys and tribal participation in the November 2022 survey work. The effort fostered tribal relations and regional cooperation on lamprey management, in direct support of treaty resources managed by the tribes and USACE regional efforts to cooperate on lamprey issues. The District further ensured the dredging action would not result in significant effects to lamprey.

[Portland District: Willamette Valley System Water Management Coordination](#)

The NWP Water Management Team holds collaborative meetings with the National Marine Fisheries Service, Oregon Department of Fish and Wildlife, Oregon Water Resources Department, Bonneville Power Administration, and others to support water management activities. Flow Management and Water Quality Team meetings are held monthly and ad hoc from March through September. In the Rogue River System, weekly coordination meetings all year are conducted with the state agencies. These meetings coordinate water release plans for the dams to support ESA listed and other species. Coordination meetings allow for adaptive management given the variable hydrology, operational limitations, and competing water demands.

[Kansas City District: Little Blue River Flood Risk Management Study Planning Charette](#)

The planning charrette for the Little Blue River Flood Risk Management Study was held on Thursday, January 13, 2022. The event was a hybrid in-person and virtual meeting hosted by the City of Independence, MO and facilitated by USACE's Kansas City District. Participants included the Little Blue River District team; members from the USACE Headquarters and Division; the non-federal sponsor, the Mid-America Regional Council; and each of the eight study partners: Jackson County, MO and the cities of Belton, Blue Springs, Grandview, Independence, Kansas City, MO, Lee's Summit, and Raytown. The purpose of the charrette was to:

- share information learned from individual scoping meetings held between the District team and each partner, in the months prior to the charrette;
- develop a mutual understanding of problems, opportunities, objectives, constraints, and project development process; and
- discuss study needs.

[Omaha District: Agrivoltaics installation at Chatfield Farms at USACE Tri-Lakes Project](#)

The Omaha District Recreation and Natural Resources Branch conducted a Section 408 Review Panel to review a request from Denver Botanic Gardens to amend an existing lease to add installation of an elevated solar array. The array would be integrated with agricultural crops to increase resiliency of food and energy systems. The Tri-Lakes Project office and Omaha District Recreation and Natural Resources Branch worked together with the project stakeholders to identify a suitable location which would meet energy generation, education, and accessibility needs for the project. During the review process letters of support were received from the local city and county officials highlighting the benefits of the project to the municipality and surrounding community. The Agrivoltaics Project was approved in FY22 and is a great example of sustainability implementation which helps meet USACE's agency goals within Executive Order 14057: Catalyzing Clean Energy Industries and Jobs through Federal Sustainability, as well as Colorado's goal of reaching 100% renewable electricity by 2040.

[Seattle District: Shellfish Aquaculture](#)

In 2020, a federal court ruled that Nationwide Permit 48 for aquaculture was invalid in Washington state. This ruling required all aquaculture permittees to file applications for individual permits within six months of the ruling. Since the ruling, Seattle District's Regulatory Branch organized a virtual Aquaculture Workshops to discuss the ruling's impacts and provide guidance for submitting new applications. Workshop participants included members of industry and the environmental community, including plaintiffs of the lawsuit. The application process was streamlined; for example, applicants were not required to resubmit the same documentation they previously submitted to USACE. The District Engineer also began holding weekly calls with aquaculture growers to listen to their concerns and provide permitting updates. These open and transparent meetings appear to be building a level of trust among parties and strengthening relationships.

South Atlantic Division

[Charleston District: Charleston Peninsula, South Carolina, Coastal Storm Risk Management Study](#)

During the final stages of the Charleston Peninsula, South Carolina, Coastal Storm Risk Management Study, consultation with the National Marine Fisheries Service (NMFS) under the Endangered Species Act (ESA) and the Magnuson-Stevens Fishery Conservation and Management Act [regarding Essential Fish Habitat (EFH)] stalled. NMFS asked for more information and requested that ESA and EFH consultation be deferred until the preconstruction, engineering, and design phase of the project. This put at risk the completion of the study and signing of the Chief's Report within the approved schedule. Charleston District elevated the issue to both South

Atlantic Division and USACE Headquarters and engaged with the Division’s Executive Risk Oversight Committee for assistance. While Charleston District continued to engage with the local NMFS office, the Division engaged the NMFS regional office to work out a resolution. Through this combined consultation effort and a continued, cooperative approach, consultation with NMFS was concluded in time for completion of the study and signing of the Chief’s Report.

Jacksonville District: Tampa Harbor Navigation Improvements Study

Jacksonville District has several civil works projects located in the Tampa Bay area. To facilitate better communication and collaboration with stakeholders in the region, Jacksonville District planners have regularly attended and presented at monthly or quarterly meetings of the Tampa Bay Regional Planning Council since 2005. Council members include local government officials, local representatives of both state and Federal resource agencies, and members of the public concerned with natural resource issues in the Tampa Bay area. Between 50–125 members currently attend these hybrid meetings. Jacksonville District’s long-standing participation in this group has built trust between the district and the Council, providing a public forum for effective communication and collaboration on district projects.

The Tampa Harbor Navigation Improvements Study benefited from this long-term and positive relationship. The ability to find beneficial uses for dredged material to lower project costs will be critical for this study due to the channel length and high cost of transporting dredged material to traditional sites, like the Ocean Dredged Material Disposal Site. The Project Delivery Team (PDT) presented to the Council four times over the past year to inform them about the upcoming study and to collaborate on ideas for the beneficial use of dredged material. The PDT also meets monthly with state and agency resource agencies outside of this public forum. The study is ongoing through August 2024, but early collaboration has identified at least five beneficial use sites that have lower cost, protect upland infrastructure, and increase bird and fish habitat in the project area.

Jacksonville District: Comprehensive Everglades Restoration Plan.

Since the early days of the Comprehensive Everglades Restoration Plan (CERP) in the 2000s, coordination between stakeholders have been a crucial component for moving the effort forward. The South Florida Ecosystem Restoration Task Force (Task Force) brings together Federal, State, and Tribal representatives involved in restoring and protecting the Florida Everglades. The Task Force was established by the Water Resources Development Act (WRDA) of 1996. USACE is a member of the Task Force. Major stakeholder coordination efforts are discussed in Task Force meetings. The Task Force facilitates coordination of working groups and science research efforts, and it provides a forum for the participating agencies to share information about their restoration projects, provide recommendations, and report on progress. USACE plays a role in the Task Force and participates in various working groups established by this group. Through this Task Force, studies like the Lake Okeechobee System Operating Manual hold monthly meetings and listening sessions to gather input for developing alternative plans.

South Pacific Division

Albuquerque District: Espanola Valley, Rio Grande and Tributaries, New Mexico Ecosystem Restoration Design Agreement

Espanola Valley is the largest scale project ever sponsored by a tribe (in this case two tribes: the Pueblos of Santa Clara and Ohkay Owingeh) in USACE history. The project was also the first to make use of the Ability to Pay

provision to provide a lower cost share for our tribal partners (88/12 instead of 65/35), reflecting on environmental justice aspects of the project. Complex negotiations at all levels of USACE resulted in this project setting the standard for future use of the Ability to Pay provision. This is a tremendously beneficial influence on Tribal Partnership Program policy that will allow tribes with limited financial resources to participate more fully in USACE programs. With adept management by USACE staff, the project has maintained a spirit of collaboration and partnership to avoid conflict. In addition, the project was the first of its kind to have a non-standard design agreement. This agreement was facilitated by the Albuquerque District tribal liaison, and was negotiated jointly between all levels of USACE, the tribes, and the ASA. As a result of the tribes' persistence in emphasizing significant natural and cultural resources, and the District's engagement with tribal elders, environmental and cultural staff, the Ecosystem Restoration Project emphasizes nature-based features and incorporates Traditional Ecological Knowledge in the design. The project design has been greatly improved and is more resilient because USACE listened to the tribes' needs and values.

[Albuquerque District: 249th Engineer Battalion Power Assessments at Navajo Nation](#)

In August of 2022 the Albuquerque District brokered a project between the Navajo Tribal Utility Authority (NTUA) at the Navajo Nation and the 249th Engineer Battalion to allow the 249th to assess the critical power infrastructure of NTUA facilities across the Navajo Nation. These assessments provided training for members of the 249th and provided valuable information to the tribe regarding backup power requirements, electric system readiness and condition, and overall system safety. This project was the first of its kind performed for a tribal nation and required significant collaboration between members of the 249th, NTUA, and the Albuquerque District Emergency Management staff and tribal liaison. The project provided assessments of 51 facilities at no cost to the tribe. The NTUA will use these assessments to improve the safety and resilience of its power infrastructure. Due to the success of the project, USACE plans to look for other opportunities to schedule training assessments with tribal nations across the country.

[Albuquerque District: Pueblo of Santo Domingo Drought Resilience Plan](#)

Originally begun as a Watershed Study under the Tribal Partnership Program, the Pueblo of Santo Domingo's Drought Resilience Plan was developed in response to an urgent need to address ongoing drought and climate change resilience. USACE Watershed Studies are generally broad documents that provide recommendations addressing several topics. However, the Pueblo had limited ability to support such a broad-ranging study and considered dropping it. Albuquerque District staff held one-on-one meetings with the Pueblo's Environment Director and other key Pueblo staff members to discuss the Pueblo's needs, resulting in a focus on the critical area of drought and climate resilience. By listening and building the relationship, USACE was able to meet the Pueblo's needs and ensure representation of their voice and concerns in the document. Relationship building was paramount to producing a focused plan that gives the Pueblo tools to seek drought and climate resilience funding.

[Albuquerque District: Pecos River Sustainable Rivers Program Environmental Flows Workshop](#)

All water in the Pecos River is owned by three irrigation districts, and at times almost no water is available to sustain endangered and imperiled species (Pecos River bluntnose shiner, Rio Grande shiner) or the river ecosystem. Albuquerque District's lead planner and facilitator convened a series of meetings in FY22 culminating with an Environmental Flows Workshop. Given the complex web of competing interests, the workshop would not have been possible without attentiveness to stakeholder concerns. The irrigation districts were fearful of an intent to take their water, and water management agencies had to listen and approach the problem from a

more vulnerable stance— that water management on the river might already be as optimal as possible given the constraints. During the e-flows workshop, participants discussed the environmental needs of fish, riparian vegetation, birds, reptiles, amphibians, and other fauna. The results included some surprising areas of common interest and action, such as the importance of controlling invasive species, the importance of aquifer recharge, the opportunity to monitor floodplain inundation during block releases and possibly to modify the ramp-up and ramp-down of releases to benefit the river ecosystem. The USACE facilitator was able to get participants to realize areas of common interest that were formerly not believed possible.

Pacific Ocean Division

[Honolulu District: Essential Fish Habitat Programmatic Agreement \(POD's Most Notable Case\)](#)

As part of USACE review of applications for Department of Army permits, compliance with other federal environmental laws is required. Under the Magnuson Stevens Act, USACE is required to consult with NMFS on applications for projects that would result in adverse effects to Essential Fish Habitat (EFH). Historically, USACE and NMFS have had numerous disagreements over the technical aspects of EFH consultation, which had resulted in delays in USACE meeting the regulatory mission of making permit decisions in a timely manner and requiring information at a level of detail commensurate with the project impacts. Over the last seven or more years, the disagreements over EFH consultation had grown increasingly fractious, resulting in NMFS providing EFH Conservation Recommendations outside of typical EFH consultation and in a breakdown of the relationship between the two agencies. From 2016 to 2020, USACE and NMFS had sporadically attempted to craft an EFH consultation programmatic agreement (PA). In 2020, the effort was reinvigorated, with enhanced engagement. The challenge of the agencies' disagreement over EFH effects determination definitions and resulting requirements to consult was resolved by removing effect-determination language from the PA and focusing on activity types and impacts. This resolution of focusing on an end product rather than on terminology is the key lesson learned for similar future interagency initiatives. In the end, after six years of work, the PA was completed in large part due to POH's Regulatory Chief's diligence, collaboration, and hard work. The PA shortens the typical EFH consultation timeframe from 30–60 or more days to 5 days or less, a great benefit to USACE permit applicants.

Southwestern Division

[Tulsa District: Eagle management plan for USACE activities \(SWD's Most Notable Case\)](#)

Increasing Bald eagle populations and nesting activity along the Arkansas River in the Tulsa area has resulted in repetitive and time-consuming compliance coordination for the diverse USACE project portfolio in the region. Biologists with the Southwestern Division's Regional Planning and Environmental Center partnered with the George Miksch Sutton Avian Research Center, and USFWS Region 2 Division of Migratory Birds staff to proactively develop a holistic eagle management plan. The plan leverages long-term eagle survey data collected by the Sutton Center, streamlines Bald and Golden Eagle Protection Act compliance and permitting for all USACE activities in the area, reduces the volume of eagle permit requests for USFWS staff, and builds working relationships with the Sutton Center and USFWS staff to improve compliance activities and timelines for current and future projects. This collaborative effort yielded an eagle take permit for one of the projects and a 5 year take permit which encompasses all USACE activity is nearing finalization. This combined effort to collect and

share eagle activity data with the Sutton Center to support future USACE compliance activities and build upon the Center's data has strengthened USACE relationships with the environmental community and the USFWS.

[Fort Worth & Galveston District: Freshwater Mussel survey for the City of Wharton Flood Control Levee Project, Wharton County, Texas](#)

USACE determined that suitable habitat exists for the two candidate freshwater mussel species Texas pimpleback, and Texas fawnsfoot within the footprint of the City of Wharton Flood Control Levee Project, located on the Brazos River. While candidate species do not have legal protection under the ESA, the USACE recognized the ecological importance of conserving candidate species, and that they may later be proposed for listing, which may result in risks to the project's construction schedule and budget. The USACE partnered with a team from the U.S. Army Engineer Research and Development Center (ERDC) and had assistance from the USFWS to complete a presence/absence survey for the candidate mussel species. The survey was challenging due to the size of the survey area, short time frames, and difficult access. By working with the USFWS, the team was able to complete a full survey effort along the bank in only 4 days. Over the course of the sampling effort, thousands of individual mussels were found, including the candidate freshwater mussel species Texas pimpleback and Texas fawnsfoot. These were recorded and later safely relocated to a suitable habitat upstream of the project area. By partnering with ERDC and the USFWS, the USACE was able to preserve a potentially threatened species and prevent future risks to the project's construction schedule and budget.

[Little Rock District: Beaver Lake Land Acquisition Study](#)

The Flood Control Act of 1954 authorized construction of Beaver Lake in Northwestern Arkansas for flood control, hydropower, and other purposes. A Real Estate Design Memorandum developed prior to construction identified land and interests necessary for the operation, maintenance, and control of the reservoir. The methods and technology used to identify and purchase these lands at the time left some low-lying areas unacquired by USACE. As a result, the current Federal Government boundary around Beaver Lake does not meet the full mission requirements. The Little Rock District (SWL) initiated a study on the impact of potential land acquisition to local landowners and businesses while also trying to balance the ongoing mission of Beaver Lake. The land acquisition brought with it significant public concern from landowners and other stakeholders. Beaver Lake provides drinking water to an estimated 1 in 4 Arkansans and supports a thriving recreation economy outside of the rapidly growing Northwest Arkansas metro area. The land acquisition was uniformly unpopular among landowners, business owners, elected officials, and the public. A great deal of work was done to ensure the right message was being presented to all interested parties to show USACEs good faith in the process. After several public and media engagements including significant television, radio, and print media coverage, as well as two public meetings, SWL determined the best path forward at this time was to provide a "willing sellers only" option for landowners affected by frequent flooding of their property. The willing sellers only option would allow landowners with frequently inundated land to sell the parcels at fair-market value to USACE while removing the fear of condemnation or "land taking."

[Little Rock District: Beaver Dam Interim Risk Reduction Measures \(IRRM\)](#)

Beaver Dam is location in the northwest corner of Arkansas on the White River in Benton, Washington, Carroll, and Madison counties and is operated as part of a system of lakes on the White River to reduce peak flows in the river downstream. Three operational changes are being made to reduce how often Beaver Lake is high in the flood pool. Lowering the frequency of sustained high pools will reduce the population at risk of flooding. Two changes modify the direct operation of Beaver Lake and a third allows for faster evacuation of flood storage

from the four upper White River lakes: Beaver, Table Rock, Bull Shoals, and Norfolk. Little Rock District staff took part in multiple media engagements as well as a coordinated series of public meetings up and down the river. These efforts were part of a full-spectrum initiative to ensure stakeholders and the public understood the changes that the IRRMs would bring and how they might affect the river, the lakes, and agriculture and agribusiness. Due to COVID restrictions, teams used engagements on state government podcasts, the public web, and through an extensive 50,000+ follower social media audience to amplify the message about the IRRMs and ensure the public had a wide range of options to learn more about the program while also ensuring personal safety.

[Fort Worth & Galveston Districts: Sustainable River Program – Neches and Brazos River Workshops](#)

The Fort Worth District has been working with the Caddo Institute and the Sustainable Rivers Program to study and implement environmental flows from USACE dams described in the existing water control manuals in collaboration with numerous state, federal, non-profit, and water rights organizations. For the first time in the Southwestern Division, environmental staff organized and executed virtual, multi-day workshops, despite COVID-19 challenges in late 2021 and 2022, to explore environmental flow opportunities in the Neches and Brazos River Basins. Over fifty staff from more than a dozen federal, state, municipal, non-profit, water authority entities discussed basin challenges, info needs, collaboration opportunities, and followed up with numerous Sustainable Rivers Program funding proposals in each basin.

[Sacramento District: Nevada Flood After Fire Workshops](#)

In September 2021, the Sacramento District Silver Jackets team completed the Nevada Flood After Fire Guide to help minimize flood after fire risks by increasing community awareness and preparedness. The guide provides content on ways to stay safe in a flood, how to prepare one's property, evacuation preparedness and checklists, ways to stay informed, post-fire hazards, and available programs to help with recovery. Silver Jackets partners involved in the successful interagency coordination that made developing the Nevada Flood After Fire Guide possible included representatives from the University of Nevada Reno Extension Living with Fire Program, USACE, FEMA, National Weather Service (NWS), Nevada Division of Emergency Management, Nevada Division of Environmental Protection, Nevada Division of Water Resources, and Carson Water Subconservancy District (CWSD). Sacramento Silver Jackets team members presented at the University of Nevada, Reno Living with Fire Virtual Series in December 2021. In February 2022, a successful hybrid workshop for Nevada's Douglas County residents, who recently experienced the second largest wildfire in the State's history, was held at the Topaz Lodge with presentations from USACE, Douglas County, CWSD, East Fork Fire Department, Nevada Division of Water Resources, Nevada Rural Water Association, NWS, and United States Geological Survey office.

Appendix B: Summary of PI Specialist Contributions to USACE

USACE’s Collaboration and Public Participation Center of Expertise (CPCX) continues to mature its recruitment, retention, and professional development strategy for PI Specialists, a program that was started in 2013 with 12 PI Specialists and has grown to a membership of nearly 40 total members across more than 25 districts. A map of the current PI Specialists, as well as a description of services provided, can be found at the website: [CPCX Public Involvement Specialists \(army.mil\)](https://www.army.mil/cpcx/public-involvement-specialists)

In Fiscal Year (FY) 2022, Public Involvement (PI) Specialists facilitated or participated actively in more than 40 stakeholder and project delivery team meetings, improving outcomes for civil works projects nationwide. In addition to the accomplishments listed in the ECCR for external engagement and collaboration, many of which were led by or supported by PI Specialists, PI Specialists are regularly consulted for expertise on team collaboration and group dynamics, assisting to overcome both external barriers (policy conflicts, emerging implementation guidance) and interpersonal challenges (staff turnover, COVID-induced virtual teaming).

PI Specialists often receive request to support teams and project leads with advice on basic meeting facilitation as well as more substantive stakeholder or public controversy or conflict. Also, PI Specialists proactively train new members and pass knowledge through mentorship and co-facilitation whenever possible. In FY22, PI Specialists provided or supported more than 30 workshops and webinars to a variety of internal communities, to build collaborative capacity and improve effectiveness of USACE team members. Lastly, PI Specialists support the enterprise through effective writing of communication plans and continuous improvement efforts and leadership or membership on multi-disciplinary Collaboration and Public Participation (CPP) CoP Workgroups, which aim to address distinct and/or ongoing areas of focus. In FY22, four main Workgroups maintained membership and momentum: Collaborative Capacity Building, Collaborative Technologies, Environmental Justice, and Risk Communication.

**Figure B.1
Meetings, Charrettes, Workshops, Webinars & Classes, Communication and Engagement Plans Facilitated, Supported or Led by Public Involvement Specialists in FY23.**

MSC / District		Meetings or Charrettes		Workshops, Webinars, Classes		Comm Plans or Other	
LRD	LRB	2	Johnstown CAP 1135 planning charrette; Vermillion Harbor Pier Repair stakeholders meeting				
LRD	LRC	1	Upper Wabash SME meeting	2	NFRPM Conference; peer stress management workshop	3	Environmental Justice webinar for IWR; Comm plan for Chicago Shoreline GRR; EJ Outreach Strategy for district (ongoing)
LRD	LRH	1	Port Clinton TTX				
LRD	LRP	3	Johnstown CAP 1135 kickoff, alts charrette; Minn Point Sec 111 charrette	5	Penn. Silver Jackets teambuilding workshop; SPD TOPPS Visioning Workshop; classes: PI in	1	Ohio River Basin Alliance Restoration Plan

MSC / District		Meetings or Charrettes		Workshops, Webinars, Classes		Comm Plans or Other	
					Planning & Coll and Conflict Transformation; module in PA IWRM on Tradeoffs;		
MVD	MVP			2	Mentoring LDP Facilitator; Peer Review Manager for NWD	4	International Board membership (Red River of the North, Souris River, Rainy Lake of the Woods); Indigenous Collaboration
MVD	MVR	2	Water Demand planning exercises for Green River Lowlands, Lower Rock River groups	10	Partnering Workshops with states (Illinois, Iowa, Wisconsin); support to district representation at Tri-state Summit; Quad Cities Council bi-monthly meetings	4	Outreach Council membership; support to volunteers for school outreach; lock and dam tour organization; Illinois Waterway DMMP Comm Plan;
MVD	MVS						
NAD	NAB	6	Ongoing meetings with CIO G6 and other agency IT pros (Collab Tech WG)			1	Membership and leadership of Collab Tech WG;
NWD	NWW					1	Columbia River Treaty support
NWD	NWP	2	Cascadia Rising Functional Exercise Review Of Concept meeting; Coastal tribes listening sessions for TPP	3	Interviews of FEMA X, Oregon State Depts, others for Socially Vulnerable communities; EJ trainings (2)	2	Willamette Valley Virtual Room EIS; membership in Risk Comm WG;
NWD	NWK	6	Ongoing meetings with CIO G6 and other agency IT pros (Collab Tech WG)			1	Membership and leadership of Collab Tech WG
NWD	NWO					2	Analysis of EJ communities in district, including GIS tool; developing stratcom plan for public outreach (new effort)
NWD	NWS					1	Shared Vision support for Regulatory Branch, strategic comms for permit applicants
SAD	SAM	1	PAS program charrette	1	National PAO Workshop presentation		

MSC / District		Meetings or Charrettes		Workshops, Webinars, Classes		Comm Plans or Other	
SAD	SAW			1	lunch and learn on virtual collab tech		
SPD	SPA	10	New Mexico Water Plan PAS project; FRM El Paso Interagency Meeting & Virtual Public Meeting (2); SPL Dam Safety TTX (Whittier Narrows, Carbon Canyon); Pecos Sustainable Rivers Program Workshop				
SPD	SPK	1	Binational Tijuana River Dam Safety TTX				
SPD	SPL	6	LA River FRM OPS Virtual Public Meeting; SPL Dam Safety TTX (Whittier Narrows, Carbon Canyon); Salton Sea Regulatory Public Scoping Meeting; Binational Tijuana River Dam Safety TTX Murietta Creek GRR – NEPA Public Scoping Meeting			4	Urban Waters Federal Partnership Quarterly Meetings
SPD	SPN			1	Regional collaboration workshop(s)	2	Comm Plan template for district; PMP Builder streamlining
POD	POH			5	Environmental Justice presentations to POH Regulatory, POA Regulatory, SPL Regulatory, and two national webinars	3	Watershed study engagement plan management
SWD	SWG	8	Sabine to Galveston (S2G) Virtual Public Info Sessions; S2G Orange County Public Open House; Gulf Intra-Coastal Waterway Study Virtual Public Meeting; SWG Stakeholder Partnering Forum; Addicks & Barker Dam Safety TTX				
SWD	SWD			1	Engineering With Nature NNBS Workshop		
TOTALS:		48	Meetings or Charrettes	29	Workshops, Webinars, Classes	29	Comm Plans or Other

